

**Appendix A**  
**Summary of Federal and State ARARs**  
**Compliance Operable Unit 2 Gilt Edge**  
**Mine NPL Site**

## APPENDIX A

### SUMMARY OF FEDERAL AND STATE ARARs COMPLIANCE OPERABLE UNIT 2 GILT EDGE MINE NPL SITE

Statute and Regulatory Citation	ARAR Determination	Description	Comment
<b>FEDERAL - Chemical Specific</b>			
Safe Drinking Water Act, 42 U.S.C. § 300f, et seq.,  National Primary and Secondary Drinking Water Regulations 40 CFR 141 and 143	Relevant and Appropriate	The National Primary and Secondary Drinking Water Regulations (40 CFR 141 and 143) establish maximum contaminant levels (MCLs) for chemicals in drinking water distributed in public water systems. The primary standards are enforceable in South Dakota under the South Dakota Codified Law (SDCL) § 34A-3A-1, et seq., and Administrative Rules of South Dakota (ARSD) § 74:04:05.	Safe Drinking Water Act MCLs are relevant and appropriate to a Gilt Edge Mine OU2 remedial action because both influent and discharged water may infiltrate the aquifers found beneath the Gilt Edge mine site. This aquifer is currently a source for public water supplies. Additionally the preamble to the National Contingency Plan (NCP) states that MCL's are relevant and appropriate for groundwater that is a current or potential source of drinking water.  These standards may be applicable in the future should EPA detect an exceedence at a public water outlet.
Federal Surface Water Quality Requirements, Clean Water Act 33 U.S.C. §§ 1251, et seq.	Applicable	As provided under Section 303 of the Clean Water Act, 33 United States Code (U.S.C.) § 1313, the State of South Dakota has promulgated water quality standards.	Contaminated water emanating from the site will be intercepted and treated as part of OU2 - Interim Water Treatment pursuant to Federal and State Clean Water Act requirements.
National Ambient Air Quality Standards 40 CFR 50.6; (PM-10); 40 CFR 50.7 (PM 2.5); and 40 CFR 50.12 (Lead).	Relevant and Appropriate	These provisions establish standards for PM-10, PM 2.5, and lead emissions to air.	National ambient air quality standards (NAAQS) are implemented through the New Source Review Program and State Implementation Plans (SIPs). South Dakota has adopted the federal standards for particulate and lead emissions. State air quality standards are applicable and federal standards are relevant and appropriate.  The Federal New Source Review program addresses only major sources. Emissions associated with proposed remedial action in OU2 will be limited to fugitive dust emissions associated with earth moving

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			activities during construction, which will occur only in isolated areas over a short period of time and will have dust control mitigation measures implemented.
<b>STATE OF SOUTH DAKOTA - Chemical Specific</b>			
Groundwater Quality Standards ARSD § 74:54:01	Applicable	This provision ARSD § 74:54:01 states that existing and future beneficial uses of groundwater shall be maintained and protected. Waters of the state in which ambient water quality is better than the minimum levels prescribed shall be maintained and protected at the better water quality. Groundwater that has an ambient concentration of 10,000 mg/L or less total dissolved solids (TDS) is classified as having the beneficial use of drinking water supplies, suitable for human consumption.	Groundwater beneath the Gilt Edge site meets the established TDS requirements and the human consumption beneficial use must be restored and maintained. Contaminated water emanating from the site will be intercepted and treated as part of OU2 - Interim Water Treatment pursuant to Federal and State Clean Water Act requirements. As a result, groundwater resources down gradient from the site will be protected.
State of South Dakota Surface Water Quality Standards SDCL § 34A-2-11, et seq., and implementing regulations	Applicable	The Clean Water Act, 33 U.S.C. § 1251, et seq., provides the authority for each state to adopt water quality standards (40 CFR 131) designed to protect beneficial uses of each water body and requires each state to designate uses for each water body. Pursuant to this authority and the criteria established by the South Dakota regulations, SDCL § 34A-2-11, et seq., establishes requirements for restoring and maintaining the quality of surface and groundwater.	Contaminated water emanating from the site will be intercepted and treated as part of OU2 - Interim Water Treatment pursuant to Federal and State Clean Water Act requirements. As a result, surface water resources downstream from the site will be protected.
State of South Dakota Surface Water Quality Standards	Applicable	Effluents discharged from water pollution control facilities into waters classified for the beneficial use of coldwater permanent fish	Bear Butte Creek above and below the Strawberry Creek confluence has been designated as a coldwater permanent fishery by the South Dakota Department of Game, Fish, and Parks

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Effluent limitations for discharges to trout fishery waters ARSD § 74:51:01:32		life propagation and coldwater marginal fish life propagation must be of high quality. In order to protect these uses, the effluent may not exceed 10 milligrams per liter (mg/L) of suspended solids and 10 mg/L of 5-day biochemical oxygen demand (BOD). The limit for suspended solids must be met at all times based on the results of a 24-hour composited sample. The limit for five-day BOD must be met at all times based on the results of any one 24-hour composited sample of the effluent. Neither pollution characteristic may exceed 17.5 mg/L in any one grab sample collected during the sampling period.	
State of South Dakota Surface Water Quality Standards  Anti Degradation Policy for Surface Waters of South Dakota ARSD § 74:51:01:34	Applicable	This provision establishes an anti-degradation policy for surface waters of South Dakota. The existing beneficial uses of surface waters of the state and the level of water quality that is assigned by designated beneficial uses shall be maintained and protected. Surface waters of the state in which the existing water quality is better than the minimum levels prescribed by the designated beneficial use shall be maintained and protected at that higher quality level. The State of South Dakota may allow a lowering of the water quality to levels established under the designated beneficial use if it is necessary in order to accommodate	Surface water downstream of the Gilt Edge Site has a designated beneficial use as coldwater marginal fish life, propagation (Strawberry Creek), and coldwater permanent fishery (Bear Butte Creek above and below the Strawberry Creek confluence). Contaminated water emanating from this Site will be intercepted and treated as part of OU2-Interim Water Treatment pursuant to federal and state Clean Water Act requirements. As a result, beneficial uses of surface waters downstream from the site will be maintained.

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		important economic or social development in the area in which the waters are located. Surface waters of the state which do not meet the levels of water quality assigned to the designated beneficial use shall be improved as feasible to meet those levels. No further reduction of water quality may be allowed for surface waters of the state that do not meet the water quality levels assigned to their designated beneficial uses as a result of natural causes or conditions, and all new discharges must meet applicable water quality standards. The State of South Dakota shall assure that regulatory requirements are achieved for all new and existing point sources and that nonpoint sources are controlled through cost effective and reasonable best management practices.	
State of South Dakota Surface Water Quality Standards  Beneficial Use for Waters of South Dakota ARSD § 74:51:01:42	Applicable	This provision establishes beneficial uses for waters of South Dakota. The beneficial use classifications of surface waters established do not limit the actual use of the waters. The classifications designate the minimum quality at which the surface waters of the state are to be maintained and protected. ARSD § 74:51:03:01 defines beneficial uses of South Dakota streams to include irrigation and fish and wildlife propagation, recreation, and stock watering. All streams in South Dakota are assigned the beneficial uses of irrigation and fish and wildlife propagation, recreation, and stock watering. The classifications only designate the quality at which	Surface water downstream of the Gilt Edge Site has a designated beneficial use as coldwater marginal fish life, propagation (Strawberry Creek), and coldwater permanent fishery (Bear Butte Creek above and below the Strawberry Creek confluence). Contaminated water emanating from this Site will be intercepted and treated as part of OU2-Interim Water Treatment pursuant to federal and state Clean Water Act requirements. As a result, beneficial uses of surface waters downstream from the site will be maintained.

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		the waters are to be maintained and protected. ARSD § 74:51:03:02 assigns additional beneficial uses to stream segments. Unless otherwise noted the entire course of a named stream is the segment with the designated use.	
State of South Dakota Surface Water Quality Standards  Coldwater Marginal Fish Life Propagation Waters ARSD § 74:51:01:46	Applicable	Establishes criteria for coldwater marginal fish life propagation waters. The criteria of parameters for coldwater marginal fish life propagation waters and their allowable variations that are not included under § 74:51:01:55 and Appendix B, unless set under § 74:51:01:24. Special effluent limitations related to coldwater fisheries are established in ARSD § 74:51:01:32.	The South Dakota Department of Game, Fish, and Parks designates Strawberry Creek as a coldwater marginal fish life propagation water.
State of South Dakota Surface Water Quality Standards  Limited Contact Recreation Waters ARSD § 74:51:01:51	Applicable	Criteria for limited contact recreation waters. The criteria of parameters for limited contact recreation waters and their allowable variations that are not included under § 74:51:01:55, unless set under § 74:51:01:24	The South Dakota Department of Game, Fish, and Parks designates Strawberry and Bear Butte Creeks as limited contact recreation waters
State of South Dakota Surface Water Quality Standards  Fish and Wildlife Propagation, Recreation, and Stock Watering Waters ARSD § 74:51:01:52	Applicable	Criteria for fish and wildlife propagation, recreation, and stock watering waters. The criteria of parameters for fish and wildlife propagation, recreation, and stock watering waters and their allowable variations that are not included under § 74:51:01:55 and Appendix B, unless set under § 74:51:01:24.	The South Dakota Department of Game, Fish, and Parks designates all waters of the state as fish and wildlife propagation, recreation, and stock watering waters.

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State of South Dakota Surface Water Quality Standards  Irrigation Waters ARSD § 74:51:01:53	Applicable	Criteria for irrigation waters. The criteria of parameters for irrigation waters and their allowable variations that are not included under § 74:51:01:55 and Appendix B, unless set under § 74:51:01:24.	The South Dakota Department of Game, Fish, and Parks designates all waters of the state as irrigation waters.
State of South Dakota Surface Water Quality Standards  Priority Pollutants and Chemicals ARSD § 74:51:01:55	Applicable	This provision establishes levels at which toxic pollutants are, or may become, injurious to public health, safety, or welfare; plant, aquatic, and animal life; or the existing or designated uses of waters may not be present in the surface waters of the state. The toxic pollutants to which this section applies are the priority pollutants and chemicals in 40 CFR Part 131 (July 1, 1995) and any other toxic pollutants or substances determined by the State of South Dakota to be of concern at a specific site.	Applicable to all waters of the state. Bear Butte and Strawberry Creek receive water from the site are considered waters of the state.
South Dakota Ambient Air Quality Standards ARSD § 74:36:02:02 and ARSD § 74:36:02:03	Applicable	South Dakota has adopted the federal standards for particulate (PM 10 and PM 2.5) and lead emissions. These standards apply to the entire State of South Dakota, and no person may cause these standards to be exceeded. These standards include normal background levels of air pollutants.	South Dakota has adopted the federal standards for particulate and lead emissions. Dust mitigation control measures will be implemented during construction activities.

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<b>FEDERAL - Location Specific</b>			
National Historic Preservation Act (NHPA), 16 U.S.C. § 470 40 CFR 6.301(b) 36 CFR 800	Applicable	This statute and implementing regulations require federal agencies to take into account the effect of this response action upon any district, site, building, structure, or object that is included in or eligible for the Register of Historic Places.	Archeological and cultural resource surveys and inventories were completed as part of the application process by Brohm Mining Company for a State Mining Permit for the Gilt Edge Mine. Pursuant to the State mining permit the State Historical Preservation Office has granted clearance for Gilt Edge Mine area of operations as having "No Adverse Affects" on cultural resources. Remedial activities will occur within the area of operations.  If any remedial action activities are necessary beyond previously permitted and inventoried areas, SHPO consultation and NHPA compliance will be addressed during remedial design.
Archaeological and Historic Preservation Act 16 U.S.C. § 469 40 CFR 6.301(c)	Applicable	This statute and implementing regulations establish requirements for the evaluation and preservation of historical and archaeological data, which may be destroyed through alteration of terrain as a result of a federal construction project or a federally licensed activity or program.	
Historic Sites, Buildings and Antiquities Act 16 U.S.C. § 461, et seq., 40 CFR 6.310(a)	Applicable	This statute and implementing regulations require federal agencies to consider the existence and location of land marks on the National Registry of National Landmarks and to avoid undesirable impacts on such landmarks.	
Fish and Wildlife Coordination Act 16 U.S.C. §§ 1531, et seq., 40 CFR 6.302(g)	Applicable	This statute and implementing regulations require that federal agencies or federally funded projects ensure that any modification of any stream or other water body affected by any action authorized or funded by the federal agency provides for adequate protection of fish and wildlife resources.	U.S. Fish and Wildlife is actively involved in this project and have approved all planned actions as being protective of fish and wildlife resources.
Endangered Species Act, 16 U.S.C. § 1531 40 CFR 6.302(h) 50 CFR 17 and 402	Applicable	This statute and implementing regulations provide that federal activities not jeopardize the continued existence of any threatened or endangered species.	EPA has consulted with representative of the U.S. Fish and Wildlife Service and South Dakota Dept. of Game, Fish & Parks to determine the existence of federal threatened or endangered species or state species of concern within the project area. These agencies have

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			confirmed that this action will not impact or threaten such resources.
Floodplain Management Regulations 40 CFR 6.302(b), and Executive Order No. 11988.	Applicable	These require that actions be taken to avoid, to the extent possible, adverse effects associated with direct or indirect development of a floodplain, or to minimize adverse impacts if no practicable alternative exists.	The Flood Insurance Rate Map prepared by the Federal Emergency Management Agency for Lawrence County, South Dakota, indicates there are no flood hazard areas in the project area.
Protection of Wetlands Regulations 40 CFR 6, Appendix A, and Executive Order No. 11990.	Applicable	This ARAR requires federal agencies and the PRPs to avoid, to the extent possible, the adverse impacts associated with the destruction or loss of wetlands and to avoid support of new construction in wetlands if a practicable alternative exists. Wetlands are defined as those areas that are inundated or saturated by groundwater or surface water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.	Based on consultations with representatives of the U.S. Fish and Wildlife Service, South Dakota Dept. of Game, Fish & Parks, and the U.S. Army Corps of Engineers, there are no wetland areas that will be affected within or adjacent to the OU2 area. However at this early phase of the project the presence and status of wetlands in the Strawberry Creek drainage is not resolved, making a finding of compliance with Wetlands Protection requirements for actions that may affect wetlands in the Strawberry Creek watershed premature.

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Migratory Bird Treaty Act, 16 U.S.C. §§ 703, et seq.	Applicable	This requirement establishes a federal responsibility for the protection of the international migratory bird resource and requires continued consultation with the U.S. Fish and Wildlife Service during remedial design and remedial construction to ensure that the cleanup of the site does not unnecessarily impact migratory birds.	EPA's consultation requirements are being met (1) through direct participation by U.S. Fish and Wildlife Service representatives on the inter-agency site investigation and remedial action planning and management team, and (2) through continued consultation during remedial design and remedial construction.
Bald Eagle Protection Act, 16 U.S.C. §§ 668, et seq.	Applicable	This requirement establishes a federal responsibility for protection of bald and golden eagles, and requires continued consultation with the U.S. Fish and Wildlife Service during remedial design and remedial construction to ensure that any cleanup of the site does not unnecessarily adversely affect the bald and golden eagles.	
Federal Resource Conservation and Recovery Act (RCRA) Subtitle C Requirements 42 U.S.C. Section 9621, 40 CFR 264.18 (a) and (b)	<b>Not ARAR</b>	Federal hazardous waste regulations that restrict the location of new facilities. New facilities can not be located within 200 feet of a Holocene fault or within a 100-year floodplain.	This action is not related to the construction of a new hazardous waste treatment, storage, or disposal facility. Therefore the location standards are not ARARs. EPA reserves the right to address this ARAR should relocation of the water treatment plant result from the interim water treatment action at the site.

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<b>STATE OF SOUTH DAKOTA - Location Specific</b>			
Beneficial Use of Stream Segments of South Dakota Identified ARSD § 74:51:03:02.	Applicable	This provision establishes beneficial uses for waters of South Dakota. The beneficial use classifications of surface waters established do not limit the actual use of the waters. The classifications designate the minimum quality at which the surface waters of the state are to be maintained and protected. ARSD § 74:51:03:01 defines beneficial uses of South Dakota streams to include irrigation and fish and wildlife propagation, recreation, and stock watering. All streams in South Dakota are assigned the beneficial uses of irrigation and fish and wildlife propagation, recreation, and stock watering. The classifications only designate the quality at which the waters are to be maintained and protected.	Surface water downstream of the Gilt Edge Site has a designated beneficial use as coldwater marginal fish life, propagation (Strawberry Creek), and coldwater permanent fishery (Bear Butte Creek above and below the Strawberry Creek confluence). Contaminated water emanating from this Site will be intercepted and treated as part of OU2-Interim Water Treatment pursuant to federal and state Clean Water Act requirements. As a result, beneficial uses of surface waters downstream from the site will be maintained.
Segment Boundaries Described, ARSD § 74:51:03:03	Applicable	This provision designates the beneficial uses of specific sections of waters of South Dakota. Section, range, and township are used to describe the beginning or end point of a stream segment; the boundary of the segment is that point where the most downstream portion of the stream crosses the boundary of that section.	
The Belle Fourche River and Certain Tributaries' Use ARSD § 74:51:03:10	Applicable	This provision designates beneficial uses for the Belle Fourche River and certain tributaries.	One of the tributaries of the Belle Fourche River is Strawberry Creek. ARSD § 74:51:03:10 designates Strawberry Creek from Bear Butte Creek to Section 5, T 4 N, R 4 E as coldwater marginal fish life propagation waters and limited-contact recreation waters. Set criteria for Class 3 and Class 8 waters are established by

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Statute and Regulatory Citation	ARAR Determination	Description	Comment
			ARSD § 74:51:01:46 and ARSD § 74:51:01:51, respectively.
State of South Dakota Solid Waste Requirements; Location Standards ARSD § 74:27:07-17	Applicable	Sets forth location standards that all solid waste disposal sites must meet. These requirements apply to any person involved in any aspect of the management of solid waste, including recycling, processing, transporting, storing, or disposing of solid waste.	Applicable to an on-site disposal unit that would be constructed to contain waste materials generated by the OU2 remedial action.
<b>FEDERAL - Action Specific</b>			
Clean Water Act Point Source Discharges Requirements 33 U.S.C. § 1342.	Relevant and Appropriate	Section 402 of the Clean Water Act, 33 U.S.C. § 1342, et seq., authorizes the issuance of permits for the "discharge" of any "pollutant." This includes stormwater discharges associated with "industrial activity." See 40 CFR 122.1 (b)(2)(iv). "Industrial activity" includes inactive mining operations that discharge stormwater contaminated by contact with, or that has come into contact with any overburden, raw material, intermediate products, finished products, byproducts, or waste products located on the site of such operations, see 40 CFR 122.26 (b)(14)(iii); landfills, land application sites, and open dumps that receive or have received any industrial wastes including those subject to regulation under Resource Conservation and Recovery Act (RCRA) Subtitle D, see 40 CFR 122.26(b)(14)(x).	Because the State of South Dakota has been delegated the authority to implement the Clean Water Act, these requirements are enforced in South Dakota through the South Dakota Surface Water Discharge System (SDSWD).  Storm water discharge best management practices will be implemented during remedial action.

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<p>Federal RCRA Subtitle C Requirements, 42 U.S.C. Section 9621, et seq.</p> <p>General Facility Standards 40 CFR 264 Subpart B</p> <p>Closure Requirements 40 CFR 264 Subpart G</p>	Relevant and Appropriate	<p>RCRA Subtitle C and implementing regulations are designated as applicable for any hazardous wastes that are actively "generated" as part of the Gilt Edge Mine OU2 site remedial action or that were "placed" or "disposed" after 1980. Also, should hazardous wastes be discovered as part of any remedial design or remedial action.</p> <p>The State of South Dakota has been delegated authority to implement the Federal RCRA Subtitle C and D programs. The State's RCRA authorities are contained in State of South Dakota Solid Waste Requirements (SDCL § 34A-6), Hazardous Waste Requirements (SDCL § 34A-11), and Mined Land Reclamation Requirements (SDCL § 45-6B), and have been applied to the Brohm mine site through the State-issued mining permit. The substantive requirements of Brohm's permit (439 as amended) are applicable to this Superfund remedy.</p>	<p>RCRA Subtitle C requirements assumes that there will be many solid wastes at the Gilt Edge Mine OU2 site, and that some of these may be placed in "waste management areas" as a result of a remedial action. Because of the similarity of these waste management areas to the RCRA "waste management unit," certain discrete portions of the RCRA Subtitle C implementing regulations will be relevant and appropriate for the Gilt Edge Mine OU2 site remedial action.</p> <p>EPA reserves the right to identify RCRA Subtitle C requirements in more detail at a later date.</p>
<p>Federal RCRA Subtitle D Solid Waste Requirements: 40 CFR 257.3-1 40 CFR 257.3-2 40 CFR 257.3-3 40 CFR 257.3-4 40 CFR 257.3-8(d)</p>	Relevant and Appropriate	<p>40 CFR 257 establishes criteria under Subtitle D of the Resource Conservation and Recovery Act for use in determining which solid waste disposal facilities and practices pose a reasonable probability of adverse effects on health or the environment. See 40 CFR 257.1(a). This part comes into play whenever there is a "disposal" of any solid or hazardous waste from a "facility." "Disposal" is defined as "the discharge, deposit,</p>	<p>Applicable to an on-site disposal unit that would be constructed to contain waste materials generated by the OU2 remedial action.</p>

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		<p>injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into or on any land or water so that such solid waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including groundwaters." See 40 CFR 257.2. "Facility" means "any land and appurtenances thereto used for the disposal of solid wastes."</p> <p>The State of South Dakota has been delegated authority to implement the Federal RCRA Subtitle C and D programs. The State's RCRA authorities are contained in State of South Dakota Solid Waste Requirements (SDCL § 34A-6), Hazardous Waste Requirements (SDCL § 34A-11), and Mined Land Reclamation Requirements (SDCL § 45-6B), and have been applied to the Brohm mine site through the State-issued mining permit. The substantive requirements of Brohm's permit (439 as amended) are applicable to this Superfund remedy.</p>	
Surface Mining Control and Reclamation Act 30 U.S.C. §§ 1201-1326	Relevant and Appropriate	This Act and implementing regulations, 30 CFR 784 and 30 CFR 816, establish procedures to protect the environment from the effects of surface coal mining operations, and to a lesser extent, non-coal mining operations. These requirements are relevant and appropriate to the covering of discrete areas of contamination. The regulations require that revegetation be used to stabilize soil	Reclamation performance standards are being developed by consultation with U.S. Fish and Wildlife Service, NCRS, South Dakota Dept. of Game, Fish, & Parks, SD State University, and SD DENR representatives. This standards will be included in the final remedy design.

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		covers of discrete areas of contamination. They also require that revegetation be done according to a plan which specifies schedules, species which are diverse and effective, planting methods, mulching techniques, irrigation, if appropriate, and appropriate soil testing.	
<b>STATE OF SOUTH DAKOTA - Action Specific</b>			
Substantive SDSWD Permit Requirements ARSD § 74:52:01-11	Applicable	These provisions state that a discharge from any point source into surface waters may not occur without a valid State of South Dakota surface water discharge permit. Point sources requiring permits include industrial discharges and privately owned treatment works. Sites under CERCLA are required to meet the substantive requirements of a permit but do not have to actual obtain the permit.	All contaminated waters emanating from the Site are intercepted and treated as part of OU2 - Interim Water Treatment pursuant to Federal and State Clean Water Act requirements.
Water Quality Statutes and Regulations ARSD § 74:51:01  Compliance with Criteria for Beneficial Use ARSD § 74:51:01:02  Restrictions for Water with Dual Classification ARSD § 74:51:01:03	Applicable	A person may not discharge or cause to be discharged into surface waters of the state pollutants which cause the receiving water to fail to meet the criteria for its existing or designated beneficial use or uses. Sites under CERCLA are required to meet the substantive requirements of a permit but do not have to actual obtain the permit.	All contaminated waters emanating from the Site are intercepted and treated as part of Operable Unit 2 - Interim Water Treatment pursuant to Federal and State Clean Water Act requirements.  Storm water discharge best management practices will be implemented during remedial action.

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<b>Statue and Regulatory Citation</b>	<b>ARAR Determination</b>	<b>Description</b>	<b>Comment</b>
<p>Application of Criterion to Contiguous Waters ARSD § 74:51:01:04</p> <p>Materials Causing Pollutants to Form in Water ARSD § 74:51:01:05</p> <p>Visible Pollutants Prohibited ARSD § 74:51:01:06</p> <p>Acids and Alkalis ARSD § 74:51:01:07</p> <p>Taste- and Odor- Producing Materials ARSD § 74:51:01:08</p> <p>Biological Integrity of Waters ARSD § 74:51:01:12</p>			
Antidegradation of Waters of the State of South Dakota	Applicable	The existing beneficial uses of surface waters of the state and the level of water quality that is	All contaminated waters emanating from the Site are intercepted and treated as part of Operable Unit 2 -

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ARSD § 74:51:01  Beneficial Use Maintained and Protected ARSD § 74:51:01:34  Future Beneficial Use Maintained and Protected ARSD § 74:54:01:03		assigned by designated beneficial uses shall be maintained and protected and the existing and future beneficial uses of groundwater shall be maintained and protected.	Interim Water Treatment pursuant to Federal and State Clean Water Act requirements.  Storm water discharge best management practices will be implemented during remedial action.
Surface Water Discharge ARSD § 74:52:01-11	Applicable	These provisions state that a discharge from any point source into surface waters may not occur without a valid State of South Dakota surface water discharge (SWD) permit. Point sources requiring permits include industrial discharges and privately owned treatment works, and stormwater associated with industrial activity. Sites under CERCLA are required to meet the substantive requirements of a permit but do not have to actual obtain the permit.	All contaminated waters emanating from the Site are intercepted and treated as part of Operable Unit 2 - Interim Water Treatment pursuant to Federal and State Clean Water Act requirements.  Storm water discharge best management practices will be implemented during remedial action.
State Hazardous Waste Management Requirements SDCL 34A-11 and corresponding rules ARSD § 74:28  Surface Impoundment Closure ARSD § 74:28:25:01  Waste Pile Closure	Relevant and Appropriate	All federal RCRA Subtitle C requirements for hazardous waste treatment, storage, and disposal facilities are incorporated by reference as State of South Dakota requirements as provided for under ARSD § 74:28:25:01 unless mentioned otherwise.  Specific requirements have been referenced back to the State Hazardous Waste requirements for surface impoundment, waste pile, and landfill closure requirements.	Mining waste at Gilt Edge is exempt from the State Hazardous Waste Management Act and RCRA Subtitle C under the Bevill exclusion.  However if disposal activity involves the use of a waste management unit sufficiently similar to a Hazardous Waste regulated unit, and the unit is to receive wastes sufficiently similar to a hazardous waste, the RCRA Subtitle C requirement pertaining to that type of waste management unit would be relevant and appropriate (55 FR 8763)

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Statute and Regulatory Citation	ARAR Determination	Description	Comment
ARSD § 74:28:25:01  Landfill Closure ARSD § 74:28:25:01		Federal and State RCRA Subtitle C requirements are both relevant to this action. State Hazardous Waste requirements were deemed more appropriate since the South Dakota Hazardous Waste program is authorized.	
State of South Dakota Solid Waste Requirements SDCL § 34A-6  Definitions SDCL § 34A-6-1.3  Facility Design and Construction ARSD § 74:27:12  Closure and Post-Closure ARSD § 74:27:15	Applicable	Sets forth standards that all solid waste disposal sites must meet. These requirements apply to any person involved in any aspect of the management of solid waste, including recycling, processing, transporting, storing, or disposing of solid waste.  Rubble sites, construction demolition sites, restricted-use sites, nonmunicipal solid waste monofills, and other types of facilities not specifically listed must be designed and constructed to protect human health and prevent degradation of the environment, including ambient groundwater quality, surface water quality, and air quality.	The definition of solid waste includes sludge from a waste treatment plant. Facilities designed to contain this sludge produced by the OU2 treatment facility must comply with SDCL § 34A-6.
South Dakota Mined Land Reclamation Act SDCL 45-6B, and ARSD § 74:29	Applicable	This act sets forth standards by which mine operators are to conduct reclamation of all affected lands. Certain discrete portions of the statutory or regulatory provisions are relevant and appropriate requirements.  The definition of reclamation is the employment during and after a mining operation of procedures to minimize the disruption from the mining operation and to provide for the rehabilitation of the affected land through the rehabilitation of plant	EPA's consultation with SD DENR during remedial design development will have satisfied this requirement.

## APPENDIX A

### SUMMARY OF FEDERAL AND STATE ARARs COMPLIANCE OPERABLE UNIT 2 GILT EDGE MINE NPL SITE

Statue and Regulatory Citation	ARAR Determination	Description	Comment
		cover, soil stability, water resources, or other measures appropriate to the subsequent beneficial use of the mined and reclaimed lands.	
Noxious Weeds ARSD § 12:62:03, et seq.	Applicable	ARSD § 12:62:03:01.06 lists weeds which are declared to be noxious statewide. A locally noxious weed is defined as any weed that is biennial, perennial, or a pernicious annual, capable of spreading rapidly, not controllable without special preventive chemical, mechanical, biological, and cultural practices, capable of materially reducing the production of crops or livestock, and capable of decreasing the value of the land. ARSD § 12:62:03:01.07 lists weeds that may be declared locally noxious.	A revegetation plan is being developed by EPA with consultation from U.S. Fish and Wildlife Service, USDA National Resource Conservation Service (with local and county coordination), South Dakota Dept. of Game, Fish, & Parks, SD State University, and SD DENR representatives. The revegetation plan will be included in the final remedy design.